Agenda item 9

Reclamation Board Meeting
October 19, 2007

Board Order 07-01
Sacramento County

Requested Board Action

The Reclamation Board Staff requests the Reclamation Board issue Board Order 07-01 directing the Department of Water Resources to remove or properly abandon the pipe crossing through the left bank levee of the Sacramento River at Levee Mile 9.08 and close Permit 263.

Location

Permit 263 is located on the left bank levee of the Sacramento River at levee mile 9.08, just north of the town of Freeport in Sacramento County. The associated valve/pump structure is located on the east side of State Highway 160

Permit Description

Permit 263 was granted by the Reclamation Board (Board) to William Dee on April 24, 1923 and permitted the installation of a14-inch wrought iron pipe through the levee on the left bank of the Sacramento River at levee mile 9.08 (Attachment A). The pipe also passes under State Highway 160 and a set of railroad tracks that were originally owned by the Sacramento Southern Railroad (current ownership of the railroad tracks is unknown). The permit also included a small valve/pump house on the east side of Highway 160. The wooden valve/pump house structure was removed by the Sacramento Regional County Sanitation District at the request of the California Department and Transportation and replaced with a concrete vault structure to improve sight distance for construction traffic onto highway 160.

Discussion

The United States Army Corps of Engineers (Corps) sent a letter to Jay Punia, General Manager of the Board, on November 1, 2006 with concerns that required the pipe crossing under the Sacramento River East Bank Levee at Levee Mile 9.08 be verified as active or abandoned (Attachment B). Staff performed a search of permitted encroachments in the area and determined the pipe in question was considered to be active and had been authorized under Permit 263.

Since this pipe passes through a slurry wall installed by the Corps, the Corps requested the Board to determine the status of the pipe. If the pipe was determined to be abandoned then it should be immediately treated in accordance with Title 23, Waters, Article 8, Section 124, Abandoned Pipelines and Conduits (Attachment C). If the pipe is active, then supporting documents were required to be submitted showing the pipe is in compliance with Title 23, Waters, Article 8, Section 123, Pipelines, Conduits, and Utility Lines (Attachment C).

If the pipe is not in compliance with Title 23, it could pose a threat to the Sacramento Area by creating a discontinuity in the levee that could act as a conduit to carry floodwaters through the levee and into Sacramento.

The Corps request regarding the pipe was associated with the Federal Emergency Management Agency (FEMA) certification requirements for the levee system in this area. With the discontinuity in the levee, the Corps would not be able to certify the levee. If the Corps could not certify the levee, then FEMA would not accredit the levee, leaving a hole in the Sacramento River levee system.

The Department of Water Resources (DWR) Real Estate Branch performed a property search and the current owner of record of the parcel where the encroachment is located was determined to be M&H Realty Partners VI (M&H).

On July 26, 2007 the Board sent a letter (Attachment D) to M&H. The letter stated if M&H wished to retain the permit they must submit a request to change the permittee of record to M&H as well as verify the integrity of the pipe via internal visual inspection and pressure test. Additionally, M&H was instructed the pipe shall have a readily accessible positive closure device per Title 23 installed on the waterside of the levee to prevent uncontrolled backflow during high water events.

M&H sent a letter on September 7, 2007 (Attachment E) requesting a 30-day extension to comply with the July 26, 2007 letter. The Chief Engineer of the Reclamation Board verbally granted that request.

A phone call was made by DWR's Floodway Protection Section to M&H on September 28, 2007 to check on the progress of the requested items. It was verbally conveyed to DWR by M&H that they were no longer interested in retaining the permitted encroachments and did not want to accept the permits. A confirmation will be sent to the Board confirming this action.

Removal or Abandonment of the Pipe

The preferred method of abandoning a pipe is to remove the pipe completely from the levee section. Since this pipe passes through a slurry wall constructed by the Corps of Engineers, under a railway, and under a State highway, grouting of the pipe has been determined to be the best alternative.

Refer to Attachment F for pipe abandonment procedures

Summary

- The Corps has requested the Board determine if the pipe crossing under the Sacramento East Bank Levee at Levee Mile 9.08 is active or abandoned.
- An inspection was requested by the Corps to determine the integrity of the pipe and to insure it is in compliance with Title 23. Without this determination the Corps would not be able to certify the levee as meeting FEMA requirements.
- A property search was performed and it was determined M&H is the current owner of the parcel where the encroachment exists.
- M&H was contacted and given 30 days to accept the permit, verify the integrity of the pipe, and install a waterside closure structure
- M&H requested and were given a 30-day extension on September 7, 2007,
- M&H verbally informed the Board on September 28, 2007 that they do not intend to accept the permit or verify the integrity of the pipe.

Staff Recommendation

Board Staff recommends the Board approve Board Order 07-01 directing the Department of Water Resources to abandon the pipe in accordance with the standards of Title 23 and close Permit 263.

Attachments

A Original Permit No. 263, dated April 24, 1923, including engineering diagram.

B Letter, dated November 1, 2006, from the USACE to Jay Punia, General Manager of The Reclamation Board, requesting status of the pipe.

C Title 23, Waters, Article 8, Section 123 and 124.

D Letter, dated July 26, 2007, from The Reclamation Board to Scott McPherson of M&H Realty Partnership, requesting confirmation of M&H's intent to retain the encroachment.

E Letter, dated September 7, 2007, from Michael T. Grehl of Merlone Geier Management, LLC, representing M&H Realty, to Mark Herold, Chief, DWR Floodway Protection Section, requesting preservation of the encroachment.

F Pipe abandonment procedure.

State of California
The Resources Agency
THE RECLAMATION BOARD

BOARD ORDER 07-01

THIS ORDER IS ISSUED TO: Maintenance Area 9
Department of Water Resources
1425 Riverbank Road
West Sacramento, CA 95605

Regarding a levee encroachment located on the left bank of the Sacramento River, Levee Mile 9.08, Maintenance Area 9.

YOU ARE HEREBY ORDERED TO: Remove the abandoned pipe.

This Order is issued under provisions of the California Code of Regulations, Title 23, Division 1, Article 4.

The Reclamation Board approved this Order on the 19th day of October, 2007.

_____
Jay S. Punia
General Manager

Attachment A

FILED WITH AND FORMING PART OF APPLICATION NO. 263

EXTRACT FROM MINUTES OF

MEETING OF THE RECLAMATION BOARD HELD

APRIL 24, 1923.

In the matter of Application No. 263, filed in the office of THE RECLAMATION BOARD on February 17, 1923, by W. DEE, for approval of plans for the installation of a 14" wrought iron pipe through the levee along the east bank of the Sacramento River about 630 feet north of the Southern Pacific Railroad station at Freeport, which application was set for hearing on April 24, 1923, notice of which was duly published in accordance with the rules of THE RECLAMATION BOARD, and which was heard on this date, - it is

ORDERED: That the plans be approved and that permission to proceed with the work be granted subject to the following conditions:

First: That either a second gate valve be installed upon the water side of the levee, with valve stem reaching to the level of the top of the levee, or that the gate valve planned for the inside of the levee be changed to the water side;

Second: That this Order shall not interfere with the right of the War Department to take such action as may be necessary in the future should any structure itself or any diversion of water cause interference with navigation;

Third: That the applicant, W. DEE, shall pay any and all expenses which THE RECLAMATION BOARD shall find it necessary to incur for the purpose of supervising or checking up any of the work performed, or for any other information needed to assure THE RECLAMATION BOARD that its Orders are being and have been complied with by said applicant.

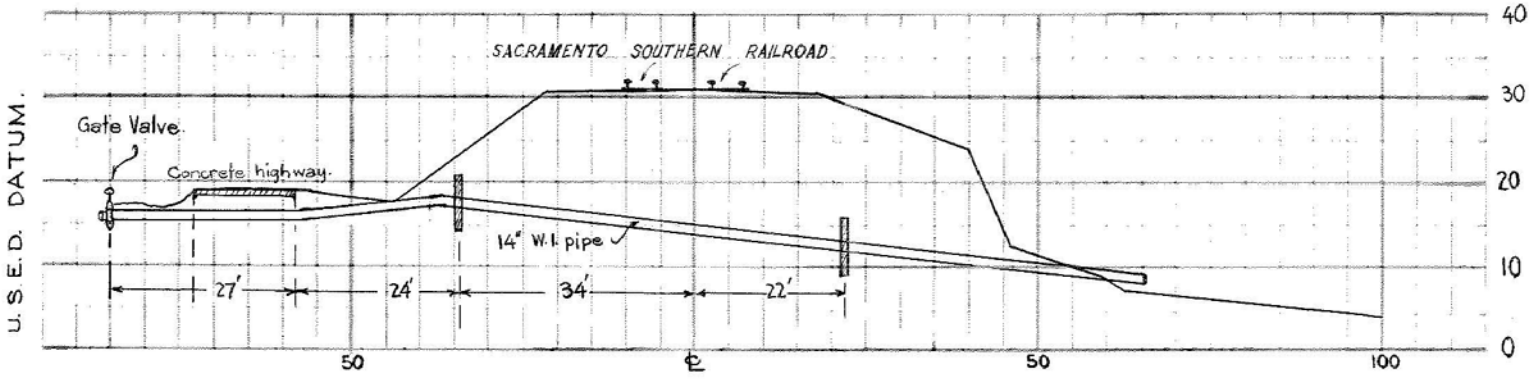
FILED WITH AND FORMING PART OF APPLICATION NO. 443

STATE OF CALIFORNIA,)
City and County of Sacramento,) ss.
Office of the Reclamation Board)

I, A. M. BARTON, Assistant Secretary of The Reclamation Board of California, do hereby certify that the foregoing is a true and exact copy of an order which was duly passed and adopted by the Reclamation Board of California at its meeting held April 24, 1923, in the matter of application of W. Dee, which said application was filed in the office of the Reclamation Board on February 17, 1923.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the Reclamation Board of California, this 30th day of April, 1923.

A. M. Barton
Assistant Secretary of
the Reclamation Board.



Collars
Land side 7'-0" x 7'-0" x 1'-0".
River side 8'-0" x 8'-0" x 1'-2"
Pipe at station 474+00 ± State Engineering Department survey.

PIPE LINE THRU LEVEE

WILLIAM DEE RANCH

Freeport California

Scale: 1 in. = 20 ft.

January 1923.

To accompany application to The Reclamation Board.

Attachment B

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

REPLY TO
ATTENTION OF

November 1, 2006

Civil Engineering Design Section B

Mr. Jay Punia, General Manager
The Reclamation Board
3310 El Camino Avenue, Room LL40
Sacramento, CA 95821

Dear Mr. Punia:

This letter concerns the 12-inch concrete-encased steel pipe crossing the Sacramento River East Bank Levee at Levee Mile 9.08 (River Mile 46.1), located 17.6 feet below the crown. As a component of the American River Common Features – Pocket Geotechnical Project, it is required that this pipe be verified as active or abandoned.

In our search of the ownership of this pipe crossing, we contacted Mr. Richard Marshall with the California Central Valley Flood Control Association. Mr. Marshall indicated that he believes the owner is Mr. Joe Borges Sr. or Mr. Joe Borges Jr., however, a real estate parcel map search indicates M/H Realty Partners VI as the owner of the property where the original pump house for the pipe is located. The pump house on the landside of the levee has also been removed and possibly replaced with an unidentified concrete structure. Mr. Mark Soto of the Flood Project Inspection Section, Division of Flood Management, Department of Water Resources, indicated that the pump house was removed during the construction of the Lower Northwest Interceptor, Sacramento Regional County Sanitation District. Mr. Soto also indicated he could not locate a Reclamation Board permit for this pipe crossing the levee.

The Corps is requesting that The Reclamation Board determine the status of this pipe. If the pipeline is abandoned, then it should be immediately treated in accordance with California Code of Regulations, Title 23, Water, Division 1, Reclamation Board, Vol. 3.2, page 4.27. This request is associated with FEMA certification requirements for the levee system in this area, which has a completion date of December 31, 2006. If the pipe is active it is requested that the permit be provided and any supporting design documents for the pipe that demonstrate that the pipe is in compliance with Title 23, Section 123.

Please contact the project engineer, Mr. Joe Sciandrone, at (916) 557-7184 if you have questions or need additional information.

Sincerely,

Thomas E. Trainer, P.E.
Chief, Engineering Division

TITLE 23. WATERS
DIVISION 1. RECLAMATION BOARD
CHAPTER 1. ORGANIZATION, POWERS AND STANDARDS

ARTICLE 1.
AUTHORITY, PURPOSE, SCOPE AND INTENT

§1. Authority.

These regulations are promulgated by the Reclamation Board pursuant to Water Code sections 8571 and 8608.

Note: Authority cited: Section 8571, Water Code. Reference: Sections 8608 and 8710, Water Code.

§3. Intent

The State has a primary interest in:

(1) Adequately protecting lands subject to overflow;

(2) Confining the waters of rivets, tributaries, bypasses, overflow channels, and basins within their respective boundaries;

(3) Preserving the welfare of residents and landowners;

(4) Maintaining and protecting and banks of the Sacramento and San Joaquin River, their tributaries, bypasses, overflow channels, and basins; and

(5) Good and sufficient levees and embankments or other works of flood control and reclamation to adequately protect fives and property from floods.

The regulations are also intended to comply with the board's obligations to the U.S. Army Corps of Engineers pursuant to numerous assurance agreements, Corps Operation and Maintenance Manuals, and 33 C.F.R. section 209. 10.

NOTE: Authority cited: Section 8571. Water Code. Reference: Sections 9710, 9532, and 9533, Water Code.

ARTICLE 4.
ENFORCEMENT PROCEEDINGS

§ 20. Initiation.

(a) The General Manager may institute an enforcement proceeding by serving a notice by certified mail, return receipt requested, to the landowner or person (referred to hereafter as the "respondent") owning, undertaking or maintaining a work that is in violation of this division or threatens the successful execution, functioning or operation of an adopted plan of flood control. The notice must state the acts or omissions which the General Manager believes to be in violation of this division or threatens the successful execution, functioning or operation of an adopted plan of flood control. The notice must specify the statutes or regulations which the respondent is alleged to have violated. This notice must be accompanied by an order requiring the respondent to respond to the notice within thirty (30) days of the receipt of the notice. The notice and the order must state that the board may seek judicial enforcement should the respondent fail to respond to the notice in a timely manner and that the board may abate violations or threats to the adopted plan of flood control through actions identified in section 22(b).

(b) Other interested parties may become parties to an enforcement proceeding by filing a notice to that effect with the board. The board shall mail a copy of that notice to the respondent within ten (10) days of receipt.

(c) Notwithstanding subdivision (a), if there is work that has not been approved by the board, the General Manager or the Chief Engineer may issue an order for compliance with this division, including an order to stop work.

§ 21. Hearing.

(a) The respondent shall have the opportunity for a hearing, which must be requested in the respondent's timely response to the notice of enforcement proceeding. Failure to file such response within thirty (30) days of receipt of the notice constitutes a waiver of respondent's right to a hearing.

(b) The respondent and other parties may request that the board provide a copy of any document, not exempt from disclosure under the Public Records Act, beginning at Government Code section 6521, that is relevant to the enforcement proceedings. The board may charge a reasonable fee for each copy.

(c) The board may hold the hearing or a partial hearing before a committee of one or more members of the board, or before the General Manager or Chief Engineer, at any place within the state. All hearings must be open to the public. The board President shall designate the hearing officer.

(d) Written notice of the hearing shall be mailed to the respondent and each other party at least ten (10) days prior to the date of the hearing.
(e) Respondents and other parties shall be mailed a copy of any staff report or recommendations on the enforcement proceedings at least ten (10) days prior to the hearing.

(f) The hearing officer shall take and make a record of the evidence. The hearing officer shall prepare a proposed decision based upon the record. At a minimum, record must include the following: (1) the notice of enforcement proceeding and all supplementary material; (2) any staff report or analysis; (3) comments or documents submitted by the respondent, protestants, any public agency, or other third person; and (4) the transcript of the hearing.

§ 22. Board Decision.

(a) The hearing officer shall prepare the proposed decision within thirty (30) days after the conclusion of the enforcement hearing. The board shall adopt its final decision at the next regularly scheduled board meeting after issuance of the proposed decision.

(b) The board decision shall by order specify what action must be taken by the respondent, at respondent's cost, and the time within which such action must be taken. The required action may include, but is not limited to the following:

(1) Removal of the work;

(2) Alteration of the work;

(3) Performance of additional work;

(4) Implementation of specified mitigation for effects on the environment;

(5) Compliance with additional reasonable conditions;

(6) Filing an application for a permit pursuant to this division;

(7) Revocation of the permit.

The board decision may also give notice that if the respondent does not comply with the decision within a reasonable time, the board may take actions to abate violations or threats to the adopted plan of flood control, such as physical removal, and recover its costs from the respondent.

(c) The conditions imposed pursuant to subdivision (b) may require the respondent to permit inspection by the board, its officers, staff, or authorized representatives of the

department during and after construction.

(d) The conditions may require the respondent to file with the board reports and data, including a description of all work done under the approved application. The board may also request in writing at any time any reports or data, even if not expressly stated in a condition to the decision.

ARTICLE 8.
STANDARDS

§ 123. Pipelines, Conduits, and Utility Lines.

(a) The following definitions apply to this section:

(1) Delta Lowlands. "Delta Lowlands" means those lands within the Sacramento-San Joaquin Delta that are approximately at the five- (5) foot contour and below as shown in Figure 8.04.

(2) Delta Uplands. "Delta Uplands" means those lands within the Sacramento-San Joaquin Delta that are above the five- (5) foot contour as shown in Figure 8.04.

(b) Pipelines, conduits, utility lines, and appurtenant structures must conform to the following criteria:

(1) Pipelines, conduits, utility lines, utility poles, and appurtenant structures may not be installed within the levee section, within ten (10) feet of levee toes, or within the floodway during the flood season unless authorized by the General Manager based on reservoir levels, stream levels, and forecasted weather conditions on a case-by-case basis, pursuant to section 11.

(2) Appurtenant structures such as standpipes, utility poles, distribution boxes, guy wires, and anchors, but not including siphon breakers, are generally not permitted in or below the levee crown, on the levee slopes, or within ten (10) feet of the levee toes. Appurtenant structures may be permitted where they will not interfere with levee maintenance or flood fight activities.

(3) Appropriate, visible markers acceptable to the local maintaining agency may be required to identify the location of buried pipelines, conduits, and utility lines. A siphon breaker or other visible appurtenance may be considered an acceptable marker for the attached buried line. Markers must be made of durable, long lasting, fire-resistant material, and must be maintained by the permittee until the pipeline, conduit or utility line is properly abandoned.

(4) Pipelines, conduits, and utility lines that pose a threat or danger to levee maintenance or flood fight activities, such as high-voltage lines, gas lines, and high pressure fluid lines, must be distinctively labeled to identify the contents.

(5) Buried high-voltage lines of greater than twenty-four (24) volts are required to be protected with schedule 40 PVC conduit, or equivalent.

(6) Overhead electrical and communication lines must have a minimum vertical clearance above the levee crown and access ramps of twenty-one (21) feet for lines carrying 750 volts or less, and twenty-five (25) feet for lines carrying higher voltage.

(7) Fluid- or gas-carrying pipelines installed parallel to a levee must be a minimum distance of ten (10) feet from the levee toe and, where practical, may not encroach into the projected levee slope.

(8) Low-voltage electrical or communication lines of twenty-four (24) volts or less may be installed parallel to a levee and within ten (10) feet of the levee toe when it is demonstrated to be necessary and to not interfere with the integrity of levee, levee maintenance, inspection, or flood fight procedures.

(9) The board may require the applicant to have any pipelines, conduits, utility lines and appurtenant structures designed by a registered civil engineer.

(c) Pipelines, conduits, and utility lines installed within the floodway must conform to the following additional conditions:

(1) Pipelines, conduits, and utility lines installed within the floodway must have a minimum cover of five (5) feet beneath the low-water channel, and a minimum of two (2) feet in the remaining area of the floodway. A greater depth of cover may be required based upon the feasibility of achieving the required cover or local soil stability and channel hydraulics.

(2) Open-trench backfill to cover pipes must be placed in a manner consistent with floodway characteristics such as erosion, deposition, and streamflow velocities. This requirement is generally ensured by using suitable material and compacting to the density of adjacent undisturbed material. Compaction tests by a certified soils laboratory may be required.

(3) In general, any standard material may be used for pipelines or conduits to be installed within the floodway ten (10) feet or more from the levee toe or the projected levee slope.

(4) All debris that accumulates around utility poles and guy wires within the floodway must be completely removed following the flood season and immediately after major accumulations.

(5) Pipelines and conduits which are open to the waterway and which could cause flood damage from uncontrolled backflow during the design flood event shall have a readily accessible positive closure device. A flap gate is not a positive closure device.

(d) Pipelines, conduits, and utility lines installed through a levee must conform to the following additional conditions:

(1) The installation of a fluid- or gas- carrying pipeline in a levee section or within ten (10) feet of the toe parallel to the centerline is not permitted.

(2) Pipelines, conduits, and utility lines must be installed through a levee as nearly at a right angle to the levee centerline as practical.

(3) Buried pipelines, conduits, and utility lines that do not surface near the levee toes must have location markers near both levee toes.

(4) Buried pipelines, conduits, and utility lines that cross the levee at right angles must have a location marker located on the levee slope adjacent to either shoulder.

(5) Buried pipelines, conduits, and utility lines that cross the levee at other than right angles must have location markers on the levee slopes adjacent to each shoulder.

(6) Pipelines carrying gas or fluids under pressure must be confirmed free of leaks during construction by pressure tests, X-ray, or equivalent methods, and must be tested anytime after construction upon request of the board.

(7) Pipelines carrying gas or fluids under pressure must have a readily accessible rapid closure device located within ten (10) feet of the landside levee toe.

(8) Pipelines and conduits open to the waterway must have a readily accessible positive closure device unless it can be demonstrated it is not necessary. A flap gate is not a positive closure device.

(9) The side slopes of trenches excavated for the installation of pipelines, conduit, or utility lines may be no steeper than one (1) foot horizontal to one (1) foot vertical. The following are exceptions to this maximum slope requirement:

(A) For shallow installations above the flood plane, e.g., twelve (12) inches, vertical side slopes may be allowed.
(B) For that portion of the trench above the design freeboard, vertical side slopes may be allowed.

(10) The bottom width of trenches excavated for the installation of a pipeline, conduit, or utility line must be two (2) feet wider than the diameter of the pipeline or conduit, or two (2) times the pipe diameter, whichever is greater.

(11) The minimum cover for pipelines, conduits, and utility lines installed through the levee crown is twenty-four (24) inches. If it becomes necessary to raise a levee crown to provide minimum cover, the longitudinal slope of the crown must be a minimum of ten (10) feet horizontal to one (1) foot vertical. Where twenty-four (24) inches of cover is not practical, a concrete or other engineered cover is required.

(12) The minimum cover for pipelines, conduits, and utility lines installed within the levee slope is twelve (12) inches. Where the installation will not interfere with levee maintenance or flood fight activities, it may not be necessary to bury the line within the levee slopes.

(13) When practical, pipelines, conduits, and utility lines installed within a levee section must be separated from parallel pipelines, conduits, and utility lines by a minimum of twelve (12) inches, or the diameter of the largest pipeline, conduit, or utility line, whichever is larger, to a maximum of thirty-six (36) inches.

(14) When practical, pipelines, conduits, and utility lines must have a minimum vertical spacing of six (6) inches when crossing other pipelines, conduits, or utility lines.

(15) A siphon breaker with a protective housing may be required and must be installed off the levee crown roadway where it will not interfere with levee maintenance.

(16) Electrical and communication lines installed through a levee or within ten (10) feet of a levee toe must be encased in schedule 40 PVC conduit or equivalent. Low-voltage lines (24 volts or less) and fiber optic cable may be allowed without conduit if properly labeled.

(17) A standard reinforced concrete U-wall for levee erosion protection is required at the outlet end of a pipeline or conduit discharging within ten (10) feet of a levee toe. See Figures 8.05 and 8.06 for U-Wall design criteria.

(18) Existing levee erosion protection must be restored by the permittee if it is damaged during the installation of a pipeline, conduit, or utility line.

(19) The permittee must replant or reseed levee slopes to restore sod, grasses or other nonwoody ground covers that are destroyed or damaged during the installation of a pipeline, conduit, or utility line.

(20) Within the levee or within ten (10) feet of levee toes, any excavation for the installation of a pipeline, conduit, or utility line must be backfilled in four (4) to six- (6) inch layers with approved material and compacted to a relative compaction of not less than ninety (90) percent, per ASTM D1557- 91, dated 1991, which is incorporated by reference and above optimum moisture content or ninety-seven (97) percent, per ASTM D698-91, dated 1991, which is incorporated by reference and at or above optimum moisture content. Compaction tests by a certified soils laboratory will be required to verify compaction of backfill within a levee.

(21) Boring a pipeline or conduit through a levee is permitted if the following additional conditions are met:

(A) The invert of the pipeline or conduit must be located at least three (3) feet above the design flood plane.

(B) The pipeline or conduit must be butt-welded. Polyethylene pipes may be used as provided in subdivisions (f)(4)(A), (f)(4)(B), and (f)(4)(C) of this section.

(C) The pipeline or conduit must be installed by the bentonite boring method or equivalent. The bentonite boring method uses an auger followed by a pipe with multiple port openings through which a bentonite slurry is pumped to ensure sealing of any voids resulting from the boring process.

(e) Pipelines, conduits, and utility lines may be installed by the open cut-method through a levee below the design flood plane, or within the levee foundation under the following conditions:

(1) One or more of the following conditions must apply:

(A) The pipeline, conduit, or utility line will be maintained by a public agency with a history of good maintenance based upon annual maintenance or inspection reports.

(B) The levee is designed to withstand a depth of less than six (6) feet of water measured with respect to the elevation of the landside levee toe.

(C) The levee is designed to withstand a depth of less than twelve (12) feet of water measured with respect to the elevation of the landside levee toe and provides flood protection for a rural area, or an area where the board anticipates little future urban development.

(2) Pipelines open to the waterway must be a minimum of thirty (30) inches in diameter, and must have a readily accessible positive closure device installed on the waterward side.

(3) Seepage along pipelines, conduits, and utility lines must be prevented by either of the following methods:

(A) The pipeline, conduit, or utility line is encased in reinforced concrete cast against firm undisturbed earth.

(B) The conduit has reinforced concrete battered walls at an inclination of one (1) foot horizontal to four (4) feet vertical or flatter.

(4) The work must commence and be completed prior to the flood season.

(5) Levees located within the Sacramento-San Joaquin Delta lowlands may only be cut below the design flood plane after appropriate engineering studies are performed and approved.

(f) Pipelines, conduits, and utility lines may be installed under a levee or stream channel by tunneling, jacking, or boring, if the following conditions are met:

(1) The pipeline, conduit, or utility line is at least thirty (30) feet under the levee.

(2) The pipeline, conduit, or utility line is verified to have the required cover. A greater depth of cover may be required based upon the feasibility of achieving the required cover or on local soil stability and channel hydraulics.

(3) If the installation is to be more than fifty (50) feet below the levee and the entire floodway and streambed, the board may waive the requirement for a permit provided a letter of intent is filed with the board prior to commencement of the project.

(4) The portal and outlet of a tunnel, jacking, or boring must be a minimum distance of ten (10) feet beyond the projected levee slope without an approved stability and seepage analysis.

(5) Installation may occur during the flood season and when the water surface elevation in the floodway is expected to be above the elevation of the landside levee toe if adequate containment cells are constructed at the portal and outlet.

(6) The installation of a pipeline, conduit, or utility line under levees in the Sacramento-San Joaquin Delta lowlands requires adequate containment cells at the portal and outlet when the installation is less than fifty (50) feet below the streambed and levee toes.

(7) Pipelines carrying gas or fluids under pressure below a levee must have provision for rapid closure.

(8) Pipelines and conduits open to the waterway and below a levee must have a positive closure device which is accessible at all times unless it is demonstrated to be unnecessary. A flap gate is not a positive closure device.

(g) The following pipe materials are allowed within a levee section when designed to resist all anticipated loading conditions and properly installed:

(1) Galvanized iron pipe is allowed if all joints are threaded. Galvanized iron pipe joints must be corrosion protected with PVC tape or polyethylene tape wrapped to a thickness of thirty (30) mils or equivalent.

(2) Schedule 80 polyvinyl chloride (PVC) pipe is allowed if it is entirely buried, all joints are threaded and the components were continually protected from ultraviolet radiation damage or were newly manufactured.

(3) Polyvinyl chloride (PVC) plastic pipe schedule 40, or better, may be used as a conduit for power or communication cables.

(4) High-density polyethylene pipe may be used for pipeline or conduit installations provided the following conditions are met:

(A) High-density polyethylene pipeline or conduit joints must be heat or electrofusion welded (ASTM Standard F1055-93, dated 1993 or D3261-93, dated 1993 which is incorporated by reference).

(B) High-density polyethylene pipelines and conduits must be designed to resist all anticipated loading conditions, and the design calculations must be submitted to the board.

(C) High-density polyethylene pipelines and conduits must be ultraviolet radiation protected.

(5) Cast-in-place reinforced concrete pipes and box culverts may be used above and below the design flood plane if the concrete is at least six (6) inches thick.

(6) Precast reinforced concrete pipes and box culverts and concrete cylinder pipes may be used above and below the design flood plane if the following conditions are met:

(A) Precast reinforced concrete pipe meets ASTM Specification C76-90, dated 1990 which is incorporated by reference.

(B) Precast reinforced concrete pipe joints and precast box culvert joints are encased in reinforced concrete cast-in-place against firm undisturbed earth.

(C) The cylinders of concrete cylinder pipes are welded and corrosion protected internally and externally.

(D) When installed below the design flood plane, precast reinforced concrete pipe and concrete cylinder pipe must be encased below the springline in concrete cast against undisturbed earth.

(7) Steel pipe may be used for all types of pipeline or conduit installations through a levee above the design flood plane if the pipe meets the following requirements:

(A) The steel pipe is resilient and not materially reduced in quality due to weathering, prior use or other deteriorating conditions.

(B) The steel pipe joints are butt-welded or threaded.

(C) The steel pipe installations are corrosion-proofed externally with a coating of material such as coal-tar enamel, asphalt-dipped wrap, mortar, PVC tape, or polyethylene tape wrapped to a thickness of thirty (30) mils, high solids epoxy, or equivalent.

(D) Unless a continuous internal lining of cement, mortar, or equivalent is provided, as appropriate for the fluid to be conveyed, new steel pipe installations may convey only non- corrosive material, and water is considered corrosive.

(E) Steel pipe installations must be designed to resist all anticipated loading conditions, and the design calculations must be submitted to the board. Steel pipe meeting the following criteria may be used without submittal of design calculations to the board:

(i) Twelve- (12) inches in diameter or less ten- (10) gauge steel pipe.

(ii) Greater than twelve- (12) inches and a maximum of thirty- (30) inches in diameter seven- (7) gauge steel pipe.

(iii) Greater than thirty- (30) inches and a maximum of forty-eight (48) inches in diameter three- (3) gauge steel pipe.

(h) The following materials are not allowed for pipelines or conduits used to carry natural gas or fluids:

(1) Aluminum pipe within a levee section or within ten (10) feet of levee toes.

(2) Cast iron pipe within a levee section or within ten (10) feet of levee toes.

(3) Pipe with flanges, flexible couplings, or other mechanical couplings within a levee section or within ten (10) feet of levee toes.

(4) Prestressed concrete pipe within a levee section or within ten (10) feet of levee toes.

§ 124. Abandoned Pipelines and Conduits.

(a) Abandoned pipelines, conduits, and all appurtenances (such as pumps, standpipes, or positive closure structures) that are located within a levee section, within the projected levee section, or within ten (10) feet of the levee toes shall be completely removed, when practical, and disposed of outside the floodway.

(1) When the invert of an abandoned pipeline or conduit within a levee is above the design flood plane elevation, the pipeline or conduit must be removed.

(2) An abandoned pipeline or conduit located within one (1) foot of the surface of the levee slope shall be removed.

(3) When the invert of an abandoned pipeline or conduit within a levee is six (6) feet or less below the design flood plane elevation, the board may require the removal of the pipeline or conduit.

(4) The side slopes of an excavation to remove an abandoned pipeline or conduit from within a levee must be one (1) foot horizontal to one (1) foot vertical or flatter.

(5) After any pipeline, conduit, or appurtenance is removed from a levee, approved backfill shall be keyed into the levee section with each lift and compacted in four- (4) to six- (6) inch layers with a relative compaction of not less than ninety (90) percent, per ASTM D1557-91, dated 1991, which is incorporated by reference and above optimum moisture content.

(6) Compaction tests by a certified soils laboratory will be required to verify compaction of backfill within a levee or within the projected levee section.

(b) Abandonment of pipelines and conduits within a floodway must be in a manner consistent with the following:

(1) After any pipeline, conduit or appurtenance is removed from a floodway, open-trench backfill must be placed in a manner consistent with the local conditions. Erosive stream reaches will require methods that compact the backfill to at least the density of that of adjacent soils. Compaction tests by a certified soils laboratory may be required to verify compaction within the floodway.

(2) Abandoned pipelines or conduits within the berm and within thirty (30) feet of the top of the streambank must not be filled with concrete but may be removed if exposed by bank erosion.

(c) If it is determined by the board that it is impractical or detrimental to the levee to remove an abandoned pipeline or conduit from a levee section, the pipeline or conduit must be completely filled with concrete.

(1) Concrete to be used to fill an abandoned pipeline or conduit must be a three- (3) sack cement mix, or equivalent, with aggregate having a maximum size of three-eighths (3/8) inch, and a water content sufficient to produce a six-(6) to eight- (8) inch slump.

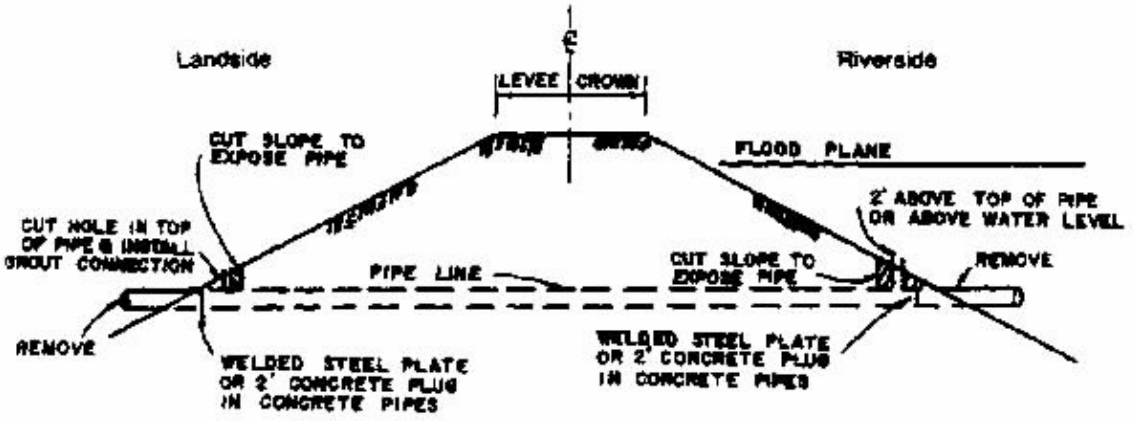
(2) A detailed plan for filling an abandoned pipeline or conduit with concrete may be required to be submitted for approval by the board prior to start of work.

(3) A pipeline or conduit to be filled with concrete must have a minimum cover of three (3) feet below the waterward levee slope.

(4) See Figure 8.07 for illustrated details on sealing abandoned pipelines and conduits.

(d) Concrete pipes may be plugged with concrete at each end as an alternative to complete filling. The length of each plug shall be a minimum of two (2) feet or twice the diameter of the pipe, whichever is greater.

Sealing Abandoned Pipes



Grouting or concrete fill of abandoned pipes below flood plane

Figure 8.07

Attachment D

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, Governor

THE RECLAMATION BOARD
3310 El Camino Avenue, LL40
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 579-0682
Permits: (916) 574-0653 FAX: (916) 574-0681

July 26, 2007

Mr. Scott McPherson
M&H Realty Partnership VI
12555 High Bluff Drive, Suite 385
San Diego, California 92130

Mr. McPherson:

A search through archived California Reclamation Board (Board) documents has revealed that a 14-inch ductile iron pipe through the Sacramento River left (east) bank levee located north of Freeport, California, Levee Mile 9.08 (River Mile 46.1), is a Board permitted (Permit No. 263) and authorized encroachment within the Sacramento River Flood Control System.

Furthermore, a property search using Sacramento County Assessors records and verified during a telephone conversation between Mark Herold, Chief of the Department of Water Resources' Flood Protection Section, and yourself, established that M&H Realty Partnership VI (M&H) is the current legal owner of the property on which this encroachment is located.

As property owner of record where the encroachment is located, M&H is hereby notified it must provide written confirmation to the Board within 30 days from the date of this letter of its intent to retain the permitted encroachment. If you wish to retain the encroachment, your written confirmation must include a request to change the permittee of record to M&H Realty Partnership VI and submittal of a certification of integrity stamped by an engineer registered in the state of California. Verification of the integrity of the pipe and appurtenant structures shall, at the minimum, require an internal visual inspection and pressure test of the pipe. Additionally, the pipe shall have a readily accessible positive closure device installed on the waterside of the levee to prevent uncontrolled backflow during a high water event. Please notify DWR's Flood Project Inspection Section at least 10 days prior to the start of any work on or testing of the encroachments at (916) 574-1213.

Any repairs required to ensure the integrity of the encroachments to be retained shall be approved by the Board in writing prior to beginning work and shall be completed prior to November 1, 2007.

If you fail to respond within 30 days from the date of this letter, the pipe will be abandoned by DWR under the direction of the Board.

If you have any questions regarding this matter, please contact Mark Herold, Chief of DWR's Floodway Protection Section, at (916) 574-0653.

Sincerely,

Stephen T. Bradley

Stephen T. Bradley
Chief Engineer

cc: Keith Swanson, DWR
George Qualley, DWR
Eric Koch, DWR
Mark Herold, DWR
Ed Ketchum, Army Corps of Engineers
1325 J Street
Sacramento, California 95814

Attachment E

MERLONE GEIER
MANAGEMENT, LLC

12555 High Bluff Drive, Suite 385
San Diego, California 92130
Telephone: (858) 259-9909
Facsimile: (858) 259-8886

September 7, 2007

VIA FACSIMILE
(916) 579-0682

Mark Herold
Chief of DWR Floodway Protection Section
The Reclamation Board
3310 El Camino Avenue, LL40
Sacramento, CA 95821

Mr. Herold:

This letter shall represent the formal request on the part of M&H Realty Partners VI L.P. ("M&H") to preserve the permitted encroachment referenced in your letter dated July 26, 2007 (the "Letter"). This letter shall also serve as a formal request for a thirty (30) day extension to respond to the Letter. As previously discussed, M&H was to respond to the terms of the Letter on or before September 9, 2007. Despite our diligence in addressing the issues raised in the Letter, we have not been able to fulfill all the terms contained therein.

M&H has been unable to locate and contract with a Certified California Engineer willing and capable of providing the requested certification of the pipe and appurtenant structures. Furthermore, M&H has been unable to identify a 3rd party capable and willing to perform a visual inspection and pressure test of the pipe. If you or anyone within your office can recommend a party willing and capable of performing these tasks please forward their contact information to my attention.

We look forward to working with you through this process. Please contact me at 858-259-9909 should you have any questions or comments.

Sincerely,

MERLONE GEIER MANAGEMENT, LLC
on behalf of M&H Realty Partners VI L.P.

Michael T. Grehl, Esq.
Director

cc: Stephen T. Bradley, DWR
Robert Donlan, Esq.

Attachment F

Pipe abandonment

Abandonment of pipes within levees may be accomplished by either of two procedures:

1. Removal of the pipe by open cut of the levee.
2. Capping and filling of the pipe with cement grout.

Criteria influencing the procedure for abandonment of the pipe are:

1. Oversized levee.
2. State highway over a section of the pipe.
3. Railroad track over a section of the pipe.
4. Pipe penetrates a seepage cutoff wall constructed by A.C.O.E.

Reclamation Board support staff recommend pipe abandonment using the cement grout method.

Grouting procedure:

1. Locate both waterward and landward ends of the pipe.
2. Sever the pipe a minimum of three feet below the waterward levee slope.
3. Remove from the flood control project works any remaining pipe extending into the project channel.
4. Sever the pipe a minimum of one foot below the landward levee slope.
5. Remove from the flood control project works any remaining pipe extending landward.
6. Thoroughly flush the pipe remaining within the levee.
7. Calculate the volume of the pipe through the levee
8. Cut hole in top of waterward end of pipe and install closeable air vent.
9. Weld end plate on waterward end of pipe.
10. Cut hole in top of landward end of pipe and install grout connection.
11. Weld end plate on landward end of pipe.

Concrete grout shall be of a three-(3) sack mix, or equivalent, with aggregate having a maximum size of three –eights (3/8) inch, and a water content sufficient to produce a six-(6) to eight-(8) inch slump. Super plasticizer may be used

Backfill for excavations within the levee section shall be placed in 4- to 6- inch layers and compacted to at least the density of the adjacent, undisturbed material.